



Missile Defense Agency

Missile Defense Agency Mission

To develop and deploy a layered Ballistic Missile Defense System to defend the United States, its deployed forces, allies, and friends from ballistic missile attacks of all ranges and in all phases of flight



**Missile Defense Capability
Globally Deployed**



MDA Advanced Research

- **Pursue a broad range of high-risk technologies**
 - Capitalize on the innovation and creativity of the Nation's small businesses and universities
 - Develop and transform cutting edge technologies into actual applications for insertion into the BMDS
- **Technology insertion into the BMDS is critical**
- **Advanced Research utilizes the following research vehicles:**
 - Small Business Innovation Research / Small Business Technology Transfer (SBIR/STTR) program
 - 4th largest SBIR/STTR program in the Department of Defense
 - Rapid Innovation Funding (RIF)
 - Broad Agency Announcements (BAA)
 - Missile Defense Science & Technology Advanced Research (MSTAR)
 - Advanced Technology Innovation (ATI)

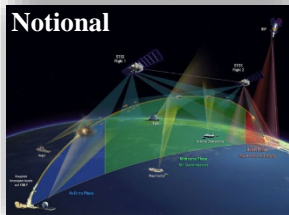




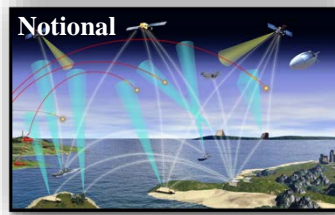
Solicitation Process

• SBIR / STTR program is a four step process

- Phase I: feasibility and concept development (\$ 100,000)
- Phase II: technology and prototype development (\$ 1,000,000)
 - Technology may receive one sequential Phase II
- Phase II Enhancement: Prototype testing and technology demonstrations and validation (\$500,000)
- Phase III: Commercialization and Transition



(SBIR/STTR Funded)

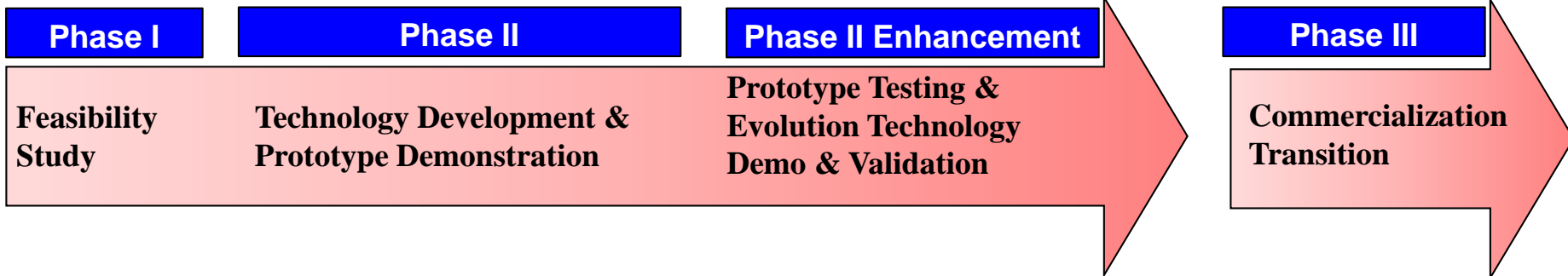


(SBIR/STTR Funded)

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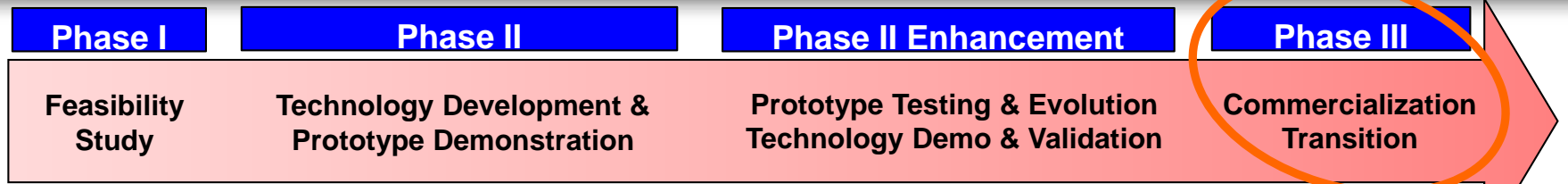


(Program Funded)





SBIR / STTR Phase III Commercialization & Transition

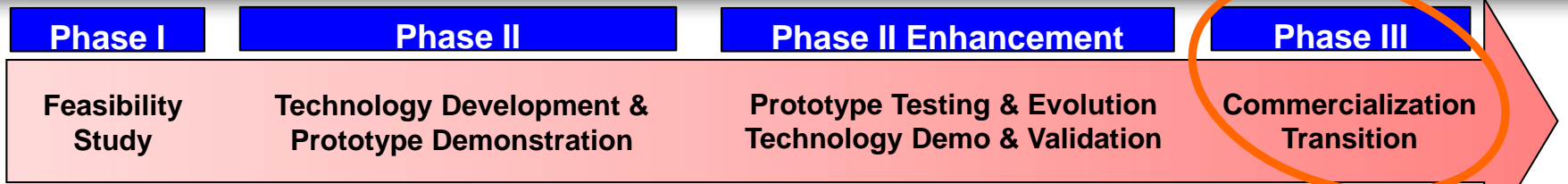


- **Non-SBIR funded R&D or production of contracts for products developed under Phase I & Phase II activities**
- **Several means to pursue Phase III funding**
 - Phase III Contract with the Government
 - Sub to a Prime Contractor
 - Rapid Innovation Fund (RIF)
- **Benefits of SBIR developed technology**
 - Eligible for sole-source non-competitive contract
 - Help meet program small business goals
 - Source to generate cost savings to achieve life cycle cost goals
 - Extends SBIR data rights for five years from end of last SBIR award





Transition Planning



- **Develop a diverse portfolio of cash flow for your technology**
 - SBIR technology often takes years to commercialize
- **Lay the framework for transition of SBIR technology early**
 - Program Office Requirements List
 - Prime Contractors have limited flexibility after contract negotiation
- **Look for opportunities outside of the Program/Agency that your SBIR/STTR technology was developed**
 - Phase I award qualifies your technology with any SBIR Program





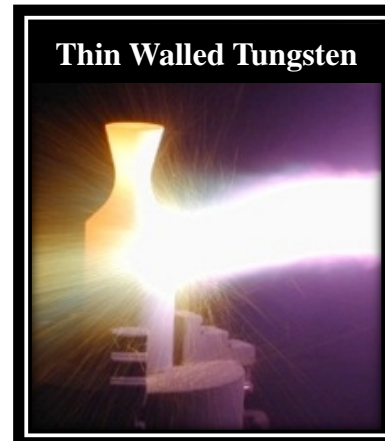
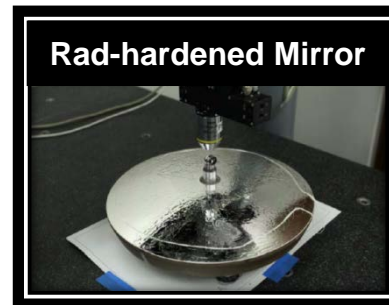
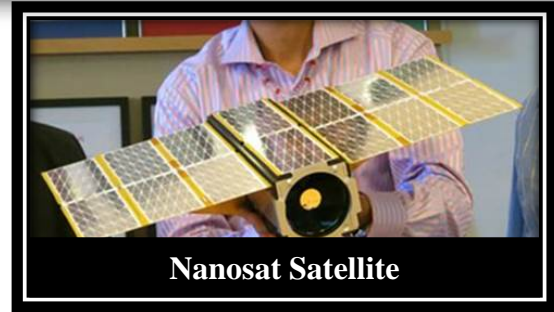
Rapid Innovation Fund (RIF) Program

- **Established under FY11 Defense Authorization Act (Section 1073)**
 - A competitive, merit-based program
 - Accelerate fielding of innovative technologies into military systems
 - Typically, all MDA RIF projects are a SBIR Phase II follow-on
 - Prioritization is given to small business
- **Key Requirements:**
 - Satisfy an operational or national security need
 - Accelerate or enhance military capability
 - Reduce
 - Technical risk
 - Cost: Development, acquisition, sustainment, or lifecycle
 - Improve timeliness and quality of test and evaluation outcome
 - Provide approach for use by an acquisition program
 - Typical award length 24 months
 - Award values up to \$3M



Recent SBIR / RIF / BAA Sponsored Research Accomplishments

- Inaugurated a nanosat testbed program to demonstrate notional Kill Vehicle communication architecture
- Executed structural test series to validate SBIR developed lightweight unitary nosecone
- Near Net Shape Manufacturing Non-Eroding, Thin Walled, Tungsten
- Completed radiation testing on hardened mirrors
- Developed high-speed test instrumentation





For More Information

www.mda.mil

- Missile Defense News, Images, Videos, Fact Sheets
- BMDS Overview, BMD Basics
- MDA Business Opportunities
(https://www.mda.mil/business/advanced_research.html)
- DoD SBIR/STTR website: <https://sbir.defensebusiness.org>
- SBA SBIR/STTR website: <https://www.sbir.gov>

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